Maryland Transit Administration
Environmental Initiatives

FRE 408 Privileged
August 18, 2006

Maryland Transit Administration Environmental Initiatives

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C. Storage Tank Replacement Progress Meeting report

8. Tank Monitoring: MTA is expediting the upgrade of its Electronic Tank Monitoring System.

9. Standard Operating Procedures: MTA is developing SOPs for multiple environmental management concerns, including issues such as UST management and waste management, in advance of formally instituting the EMS process.

   A. Standard Operating Procedure - Bus Operations guidelines

   B. Standard Operating Procedure - Hazardous Waste Recordkeeping guidelines

   C. Standard Operating Procedure - Hazardous Waste Determination, Storage and Labeling guidelines

10. SWPPP and SPCC: MTA has revised both SWPPP and SPCC plans based on EPA feedback and has resubmitted these plans.

11. Site Investigation Plan: MTA developed and submitted the Plan to MDE on June 28, 2006 to address a leak that occurred earlier that same month, and obtained MDE acceptance of the Plan on July 7, 2006.

   A. Site Investigation Work Plan

   B. Maryland Department of the Environment correspondence approving Site Investigation Work Plan

12. Product Management: MTA is evaluating its product storage and management system issues to minimize the potential for accidental releases.

1. **Communication:** MTA/MDOT is conducting weekly multi-disciplined roundtable meetings to address environmental issues and, through these meetings, is working on improving interdepartmental communication.

Internal MDOT/MTA communication:

Key, high-level MTA and MDOT HQ players meet weekly to identify and coordinate action items. The committee was established to:

(1) address environmental compliance issues for the MTA,
(2) avoid duplicating efforts between various MTA Departments,
(3) troubleshoot and discuss ongoing work, and
(4) discuss projects that include an environmental component.

Ron Keele, executive director of Office of Safety and Risk Management (OSRM), initiated these meetings. The meetings started on February 15, 2006, and by June became a weekly tool to assess progress and troubleshoot. A wide range of players attend these meetings, including representatives from OSRM, Versar, Procurement, Planning & Policy, Facilities Engineering, Bus Maintenance, Lightrail Operations, MARC/Commuter Bus, and Metro. This internal system of communication continues as a work in progress. MTA is making every effort to ensure communication issues are addressed quickly and thoroughly. In addition to improving intra-agency coordination of efforts, MTA is instituting a global system of tracking progress on environmental initiatives.

Communication with Regulators:

MTA has made an effort to contact Troy Jordan of EPA on a weekly basis commencing June 8, 2006 to provide Mr. Jordan with an update on the status of various tasks. MTA also regularly contacts the Maryland Department of the Environment (MDE) with questions and status updates to maximize compliance with State environmental requirements.

2. Staffing: MDOT has overcome significant obstacles to successfully hire new employees with environmental experience and responsibility.

Background:

MDOT has been operating under budgetary constraints that prevent it from creating new personnel identification numbers (PINs). In the face of this obstacle, MDOT sought legislative relief in the form of an exception to the hiring restriction. MDOT went so far as to enlist the Chesapeake Bay Foundation's help lobbying the Maryland Legislature for budgetary changes. This significant effort was successful and MDOT received authorization to hire three new employees with environmental experience and responsibility.

Action:

In July, MDOT hired two new employees with environmental experience who will help each MDOT agency, including MTA, address, plan for and monitor environmental compliance. They are Barbara Grey and Lester Facey. The Office of Safety and Risk Management (OSRM), the lead department in environmental compliance matters, will coordinate with Ms. Grey and Mr. Facey concerning environmental issues. Among other things, it is anticipated that these employees will oversee and assist in the development and implementation of an MDOT-wide Environmental Management System (EMS).

In addition, MTA has been granted a PIN for an environmental analyst, who will have the responsibility of assisting the OSRM team in analyzing and addressing environmental problems. MTA has selected a candidate, and expects this new environmental analyst to begin work in September of this year.

MTA has also obtained the ongoing assistance of an independent environmental consultant, Versar, Inc., in an effort to expedite environmental compliance issues. Versar has aided MTA with its ongoing efforts to ensure that it has effective contingency plans for each applicable MTA location, tank management plans, and global environmental management training to include SWPP, SPCC, HAZMATs, and to aid implementation of improved environmental practices.

3. **Funding:** MDOT is dedicating substantial funds for environmental compliance improvement projects.

MDOT has earmarked a total of $24 M to address environmental compliance issues and put a permanent Environmental Management System (EMS) in place. This includes the following: For calendar year 2006, MTA committed approx $400,000 for environmental compliance for various consultants. For FY 2006-2011, MTA has budgeted $11.6 M for environmental compliance support. For FY 2006-2008, another $12 M has been budgeted for UST removal. These budgeting decisions were made by MTA in the spring of 2005.

This money will be used to pay for the removal, maintenance, and installation of USTs, completion of the EMS Gap Analysis, design and implementation of the EMS, completion of compliance audits, and completion of an audit of the EMS.

4. **Training:** MTA (1) is aggressively conducting SWPPP training; (2) ensures that appropriate employees receive biannual HAZMAT training and; (3) is in the process of developing a thorough training guide.

MTA is aggressively conducting SWPPP training for all employees at MTA who handle chemicals or may otherwise serve as first responders to spills or other wastewater problems. To date, 433 of 750 identified employees, or 57%, have been trained. It is anticipated that all employees will complete this training by the end of the year. Attendance sheets are kept at the training sessions. Training materials are also given to all participants. (See Tab A.) MTA is committed to following the training regimen and to offer recertification in the future, as well as to offer training to new employees.

MTA provides its store room attendants with biannual HAZMAT training, which is conducted at the Maryland Fire and Rescue Institute (MFRI). Attendance is kept and course materials are used. (See Tab B.) MTA is planning to expand on HAZMAT training and provide this educational tool in-house. MTA has also developed, and is currently implementing, new Standard Operating Procedures (SOPs) for Hazardous Waste Recordkeeping and Determination, Storage and Labeling. (See Tabs 8.B & 8.C.)

Additionally, MTA is developing a comprehensive training guide to be included in the EMS. The training guide will include a matrix of employees with training needs and a detailed schedule sequence, including appropriate refresher courses. An example of such training is the newly developed and soon to be implemented UST Inventory Reconciliation training program. (See Tab C.)

MTA STORMWATER POLLUTION PREVENTION TRAINING COURSE

What is SWPPP?

Stormwater Pollution Prevention Plan

- Facility Description
- -Potential Sources of Pollution
- -Potential Receiving Waters
- - Potential Contaminants by Drainage Area
- - Measures and Controls -

REGULATIONS

- FEDERAL:
  - 40 CFR 122.26

- STATE:
  - COMAR 26.17.02
  - COMAR 26.17.01-1
  - www.dsd.state.md.us

Regulations - Federal

40 CFR 122.26

- Regulates stormwater discharges
- Permits
- Runoff pollutants
- Stormwater effluent limitations
- Stormwater controls
- Storm sewer systems and controls
- Management plans (SWPPP, SPCC)

Regulations - State

- Maryland's Stormwater Management Program (COMAR 26.17.02)
- 2000 Maryland Stormwater Design Manual (COMAR 26.17.02.01-1)
- General Discharge Permit for Storm Water Associated with Industrial Activities (Discharge Permit No. 02-SW)

MTA ACTIVITIES SUBJECT TO STORMWATER QUALITY

- Fueling
- Maintenance
- Painting
- Washing
- Loading/Unloading Materials
- Above-Ground Storage
- Erosion

Potential MTA Pollution Sources

- 500-Gallon single-walled diesel fuel AST
- Gasoline Fueling Station (Concrete Pad)
- Outdoor Storage Area
- Used Lead-Acid Batteries Storage Area
- 55-Gallon Drum Storage Area (Uncovered and no Secondary Containment)
- Bus parking Lot (fluid leaks from parked vehicles)

POTENTIAL WATER CONTAMINANTS

- Organic substances
  - Oils & Grease
  - Polynuclear Aromatic Hydrocarbons (PAHs)
  - Fuel constituents
- Inorganic substances
  - Heavy metals (e.g., lead, chromium)
  - Acids (e.g., sulfuric acids from batteries)

MEASURES AND CONTROLS
Best Management Practices

- **Good Housekeeping**
- **Spill Prevention and Response**
- **Materials Management Practices**
  - Preventive Maintenance
  - Visual Inspections
  - Sediment and Erosion Control
  - Management of Runoff

GOOD HOUSEKEEPING

- Implement careful material storage practices.
- Schedule routine cleanup operations
- Maintain well-organized work areas
- Maintain up-to-date material inventory
  - Identify all chemical substances present
  - Label all containers

Labeling containers

Organized work area

Material storage

Good Housekeeping

- Regular Vacuuming and/or Sweeping
- Prompt Clean up of spills
- Identification of housekeeping & Spill Response Equipment
- Displayed Signs
- Instruction on Securing Drums & Containers
- Schedule of Housekeeping Activities

SPILL PREVENTION & RESPONSE

Spill kit

Booms

- Identification of potential spill areas and drainage routes
- Reporting of spills to appropriate parties
- Specifying material handling procedures and storage requirements
- Implementing spill response procedures

MATERIALS MANAGEMENT PRACTICES

- Neatly organize materials for storage
- Identify all toxic and hazardous substances stored, handled, and produced onsite
- Discuss handling procedures for these materials

SPILL VS. RELEASE

- A **spill** is contained within MTA property lines.
- A **release** is a spill that has migrated off of MTA property boundaries.

SPILL VS. RELEASE

A spill is:

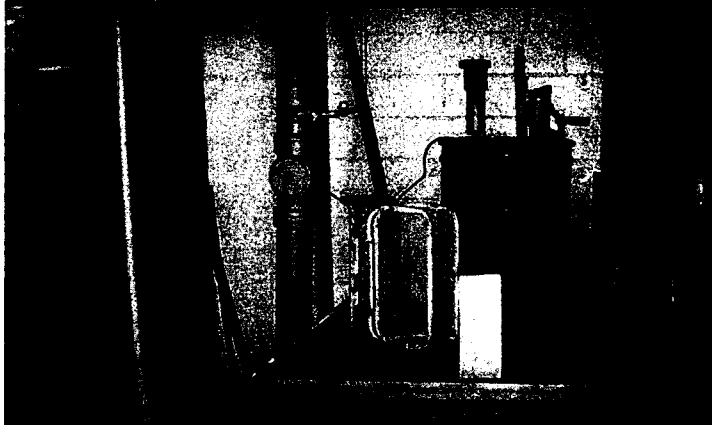
- Petroleum & Hazardous materials that drips, leaks, spill, or ruptures from process/equipment/container

A release is:

- Spills that go offsite via soil, air, or waterways
- UST/AST leaks, ruptures
- Spill hazardous material/waste during transport
- Leaking fuel at a bus accident scene

SPILL/RELEASE SCENARIOS

- Loading and unloading
- Vehicle accident
- Pouring from one container to another
- Poor planning



SPILL vs. RELEASE

- Which is worse?
  - 10 gallons of diesel on the parking lot
  - 10 gallons of diesel at a bus accident on the street?
- Of the two, which is easier contained?

- Which is worse?
  - An overflowing oil-water separator
  - An oil water separator that received one gallon of gasoline
- Of the two, which is easier contained? Why?

SPILL RESPONSE RESPONDERS

- First Responder - stops spill, mitigates spread of contamination (i.e., defensive action only)
- Hazardous Materials Technician – further contains and cleans up spill
- On-Scene Incident Commander – coordinates activities of First Responders and HazMat Technicians
  - Supervisor until outside source arrives (e.g., HazMat team, Fire Commander)

SPILL RESPONSE RESPONDERS RESPONSIBILITY

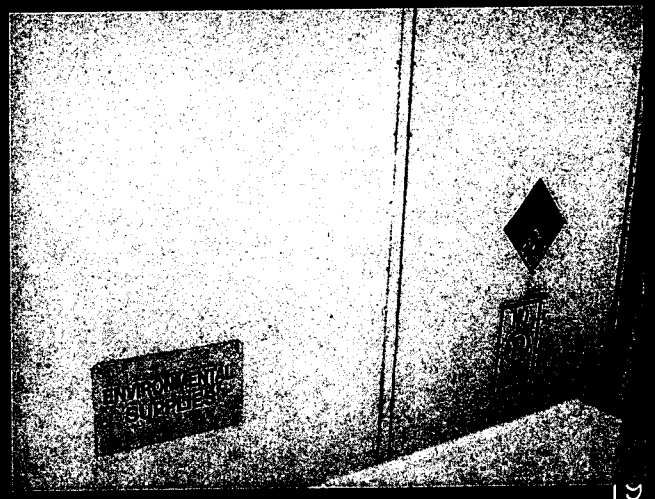
- Ensure that release does not occur, recur, or spread to other areas

- Supervisor provide for treatment, storage, disposal of recovered hazardous material

- Supervisor ensures cleanup procedures are completed and emergency equipment is cleaned and fit for use before operations resume

SPILL RESPONSE
INITIAL RESPONSE

- Notify Supervisor!
- Supervisor will serve as the On-Scene Incident Commander (OSIC) until relieved by outside agency (e.g., fire chief)
- Use of PPE/available resources



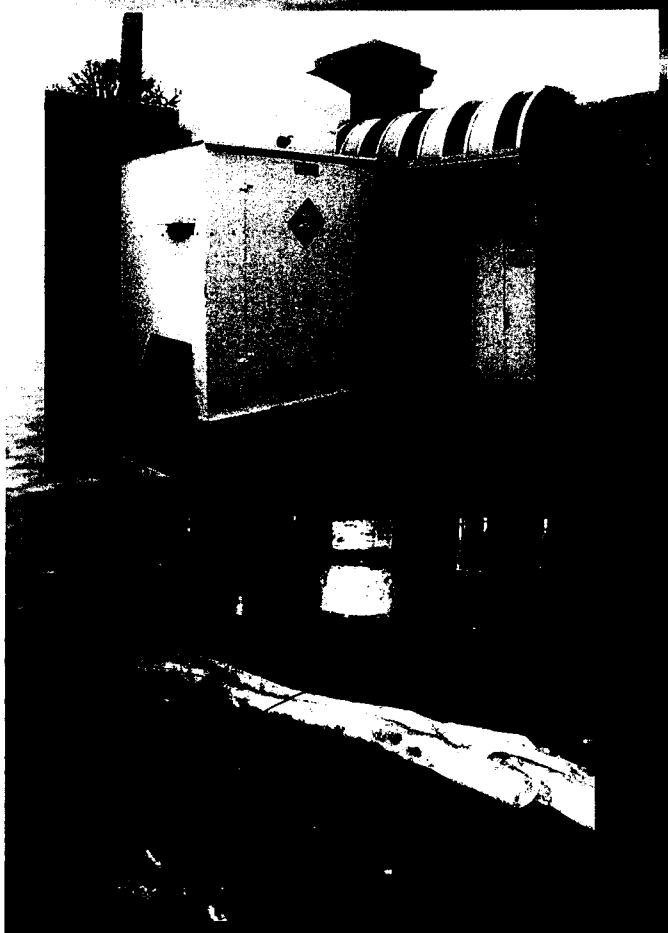
SPILL ACTION
PROVIDE INFORMATION

- Caller's identification
- Facility Name
- Location within facility
- Time discovered
- Type and estimated quantity

PROVIDE THE FOLLOWING INFORMATION (continued)

- Nature of injuries
- Status (absorbent applied?)
- Fire or explosion involved?
- Are storm sewer inlets or drains blocked?
- Is off-site release involved or imminent?

TYPES OF RESPONSES



- Stop leaks
  - Roll drums upright (hole pointing up)
  - Turn off process
  - Shut pipe valves
- Contain spills
  - Booms, pads, sand, dirt
- Divert runoff from spills
- Apply temporary patch
- Recover/remove contaminated materials

EXAMPLE OF A RESPONSE

Oil Spill to Stream:

- Absorbent boom across the stream so floating oil will be contained.
- Skim, collect or otherwise remove the floating oil, sludge or emulsion deposited on the water surface and on the adjoining shorelines. Appropriate absorbent material shall be used to properly collect the material. PPE shall be used by employee performing the clean up.
- Place used absorbent materials and oil and sludge into appropriate containers for disposal (55 gallon steel drums for petroleum products).

Thanks!

Always remember, storm water pollution prevention is everyone's duty, not just management!

MTA STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TRAINING COURSE

SUMMARY OF DATES/PARTICIPANTS

Initial Class: 12/29/2005
Last Class: 7/12/2006

NO.	DATE	CLASS	PARTICIPANTS
1	**7/12/2006**	**8:30 a.m.**	**22**
2	**7/12/2006**	**9:45 a.m.**	**16**
3	**7/12/2006**	**11:00 a.m.**	**8**
4	**7/12/2006**	**12:45 p.m.**	**3**
5	**7/12/2006**	**2:00 p.m.**	**13**
6	**7/12/2006**	**3:15 p.m.**	**2**
1	5/31/2006	9:00 p.m.	27
2	5/31/2006	10:00 p.m.	5
3	6/1/2006	12:00 a.m.	15
4	6/1/2006	2:00 a.m.	2
5	4/27/2006	8:00 a.m.	10
6	4/27/2006	9:00 a.m.	21
7	4/27/2006	10:00 a.m.	4
8	4/27/2006	1:00 p.m.	11
9	4/27/2006	2:00 p.m.	3
10	4/27/2006	3:00 p.m.	3
11	3/29/2006	8:00 a.m.	21
12	3/29/2006	9:00 a.m.	15
13	3/29/2006	10:00 a.m.	21
14	3/29/2006	1:00 p.m.	15
15	3/29/2006	2:00 p.m.	17
16	3/29/2006	3:00 p.m.	18
17	3/15/2006	8:00 a.m.	3
18	3/15/2006	9:00 a.m.	4
19	3/15/2006	10:00 a.m.	0
20	3/15/2006	1:00 p.m.	0
21	3/15/2006	2:00 p.m.	1
22	3/15/2006	3:00 p.m.	4
23	2/24/2006	3:00 p.m.	8
24	2/24/2006	12:00 p.m.	8
25	2/24/2006	9:00 a.m.	29
26	2/24/2006	6:00 a.m.	21
27	2/6/2006	11:00 p.m.	11
28	2/6/2006	9:00 p.m.	9
29	1/25/2006	1:00 p.m.	9
30	1/25/2006	10:00 a.m.	18
31	12/29/2005	1:00 p.m.	16
32	12/29/2005	10:00 a.m.	20

TOTAL TRAINED PRIOR: 369
TRAINED 7/12/06: 64
TOTAL TRAINED TO DATE: 433

Next Class Scheduled for: 8/16 & 8/17

Note: "Bold" reflects the most recent class offered.

M 'rael Klevenz

MTA STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TRAINING COURSE
SIGN IN SHEET
Date: JULY 12, 2006 Time: 8:30 AM CLASS

	NAME	PAYROLL NUMBER	DEPARTMENT/LOCATION	TITLE
1	Leslie Lowe	63645	NW (Shop)	B-Cleaner
2	Donald Leeks	48061	N. West	Machanic
3	Vivian Harris	32355	N. West	B-Cleaner
4	Georgia Bowens	07173	NW	'A' Cleaner
5	David Smith	73440	N/W	A-Rep.
6	Andrew Rowlette	67358	NW	A Rep
7	Avon Byrd	11377*	Wabash	A Rep
8	JACKIE DONALDSON	20200 *	WABASH	ET
9	JEFFREY FENNELL	23437	N/W	A REP
10	John LaRocha	45-439 *	Northwest	Supervisor Tech
11	Jeff Rice	65127	N/W	Bus Technician
12	Ahamad Ramjohn	63560 *	RCM	"A" Mechanic
13	Peoples Dorothy	60211	N.W.	B-Cleaner
14	Joan B Paige	58833 *	RCM	"A" Cleaner

MTA STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TRAINING COURSE
SIGN IN SHEET
Date: JULY 12, 2006 Time: 8:30 AM CLASS

	NAME	PAYROLL NUMBER	DEPARTMENT/LOCATION	TITLE
15	Arnett Jones	40326 *	Wabash Rail	Technician
16	Andre Duncan	20900 *	Wabash Rail Maint	Supervisor
17	Roberto Romero	66876 *	Wabash Rail Maint	Supervisor
18	AJIT R KUMTA	44609 *	WABASH RAIL "	"A" REPAIRMAN.
19	Martin J. Ibanez	38390 *	WABASH. RAIL	E.T.
20	Rudl Mitchell	54000 *	Northwest	Repairman
21	James Carter	12556:	Wabash Rail	A Repairman
22	Debra Pedro-Sykes	600[illegible] *	Wabash Rail	A Repairman
23				
24				
25				
26				
27				
28				

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MTA STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TRAINING COURSE
SIGN IN SHEET
Date: JULY 12, 2006 Time: 9:45 AM CLASS

	NAME	PAYROLL NUMBER	DEPARTMENT/LOCATION	TITLE
1	RAVI BAJPAI	*02610	M.T.A. WABASH	"B" REPAIRMAN
2	Carolyn Caldwell	52860	Wabash	"C" Repairman
3	Julius Dowg	20505	N.W.	A Repairman
4	Dennis Crowl	17733	North West	A Repairman
5	Mary Metts	53600	N/W	C. Repairman
6	Constance Howard	36976	Wabash	Cleaner
7	Alonzo Roper	67050	M/W	A. REPAIR MAN
8	Charles Abbey	00177	NW	"A" Repairmans.
9	JAMES ETITI	23032	RCW	A REPAIRMAN
10	Chris Alsina	01036	N/W	A Repairman
11	Donald McGraw	51685	Wabash-SysMaint	Supervision
12	Raleigh C. Moss Jr.	55010	Wabash/Systems Maint.	Supervisor
13	Eric Hawkins	33262	Wabash/syst. Maint	Supervisor
14	E Cabrera Heriberto Cabrera	11527	wabash	nobody

MTA STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TRAINING COURSE
SIGN IN SHEET

Date: JULY 12, 2006 Time: 9:45 AM CLASS

	NAME	PAYROLL NUMBER	DEPARTMENT/LOCATION	TITLE
15	STAN FLOOD	25575	WABASH RAIL	TECH
16	James Carter	12559	N.W. Shop	"A" Repairman
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MTA STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TRAINING COURSE
SIGN IN SHEET
Date: JULY 12, 2006 Time: 11:00 AM CLASS

	NAME	PAYROLL NUMBER	DEPARTMENT/LOCATION	TITLE
1	J C Fields Sr.	23705	N / WEST	A-Rep.
2	Kevin Simpson	72657	11	11
3	KENWIN BRANKER	07935	WABASH	ET.
4	GERARD TUERK	80348	WABASH	E.T.
5	Don Horrell	36704	WABASH	E. T.
6	Kevin Brown	09190	N/W	A. Rep.
7	Kenneth Marais	49852	N/W	A. Rep.
8	Rodney Williams	86082	N/W	A Rep.
9				
10				
11				
12				
13				
14				

MTA STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TRAINING COURSE
SIGN IN SHEET

Date: JULY 12, 2006 Time: 12:45 PM CLASS

	NAME	PAYROLL NUMBER	DEPARTMENT/LOCATION	TITLE
1	WAYNE EVANS	22450	NW	A REPAIRMAN
2	Philip Hinton	35165	NW	A Repairman
3	Randy R Murdock	55423	NW	A- Repairman
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MTA STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TRAINING COURSE
SIGN IN SHEET
Date: JULY 12, 2006 Time: 2:00 PM CLASS

	NAME	PAYROLL NUMBER	DEPARTMENT/LOCATION	TITLE
1	Gary Thomas			
2	Larry Tiemann	79155	474 - ~~OC~~ OC	Electo. Mech
3	DAVID JAWORSK	39325	474 OC	ELECTRO-MECH
4	Philip Hume	37698	474 OC	Plumber
5	Larry Dauk	20510	474 OC	ELECTRO-MECH
6	John F. Gabrosk.	26415	464 RAIL	A-Repairman
7	McAuliffe, Michael	50900	464 Wabash Systems	Elect. Tech
8	William B. Johnson III	40315	474 OC	ELECTRICIAN
9	PAUL HALL	31324		
10	JASON Tully	62368	WABASH SYSTEMS	A REPAIRMAN
11	[illegible]	14766	Systems Maint	ET
12	Michael Tubman	80176	464/Metro	A-REPAIRMAN
13	MAURICE J BARTLETT	03660	464 / Metro	ET
14				

MTA STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TRAINING COURSE
SIGN IN SHEET
Date: JULY 12, 2006 Time: 3:15 PM CLASS

	NAME	PAYROLL NUMBER	DEPARTMENT/LOCATION	TITLE
1	Charles R Jackson Jr	38811	424 NW	A Repairman
2	Kenneth Walker	82272	424 NW	A Repairman
3				
4				
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Example of Certificate

MTA Stormwater Pollution Prevention Plan Training Course

This is to certify that on July 12, 2006

Leslie Lowe

Successfully completed the classroom and practical course work thus fulfilling a Stormwater Pollution Prevention Plan (SWPPP) requirement as mandated by the General Discharge Permit for Storm Water Associated with Industrial Activities (Discharge Permit No. 02-SW).

Michael A. Klevenz

Michael A. Klevenz, PE